# Jenkins Pipeline with ECR, Docker, and K8s ✨

## Prerequisites

* Jenkins Server configured with a build node. 💻
* AWS CLI installed and configured on the Jenkins node. ☁️
* Git installed on the Jenkins node. 🌳
* etc...

## Step 1: AWS Setup

* Open AWS ECR and create a public repository named nginx-app. 📦
* Choose the appropriate operating system (Linux). 🐧

## Step 2: Push Commands

* Take the push commands from the respective repository for building and pushing the Jenkins pipeline. 🚀

## Step 3: Jenkins Plugin Download

* Navigate to Manage Jenkins -> Plugins -> Available Plugins. 🔌
* Download and install the following plugins:
  + AWS ECR
  + Docker API
  + Docker Pipeline
  + Other relevant plugins as needed

## Step 4: Create Pipeline

* Create a new build pipeline with any name. 📝
* Refer to the following GitHub repository for a suitable script: https://github.com/SumitShedage/jenkins-ecr-kubernetes/blob/main/Jenkinsfile

### Script Edits

* Inside the script, Replace the following variables with your credentials:
  + AWS\_ACCOUNT\_ID
  + AWS\_REGION
  + ECR\_REPO
  + IMAGE\_TAG
* In the 'Build Docker Image' stage, replace the sample push command with your repository's ECR push command. 🏗️

## Step 5: Configure Jenkins Credentials

1. Go to Manage Jenkins -> Manage Credentials -> global. 🔑
2. Add a new credential of type 'Secret file'. 🤫
3. Give it a meaningful ID (e.g., 'kubeconfig'). 🔖
4. Upload your /.kube/config file. 📁

## Step 6: Build the Pipeline

* Now you are ready to build the pipeline. 🎉